

Date: Tuesday, 07/04/2009 10:24:45 AM
 User: Julie Dawson

Process Sheet

Customer :	CU-DAR001 Dart Helicopters Services	Drawing Name :	SHORT STEP ASSEMBLY HIGH SKID RH	
Job Number :	46998			
Estimate Number :	10720			
P.O. Number :		Part Number :	D350591214	
This Issue :	07/04/2009	S.O. No. :		
Prsht Rev. :	NC	Drawing Number :	D3078 REV A	
First Issue :	//	Project Number :	N/A	
Previous Run :	45342	Drawing Revision :	A	
	Type :	Material :		
	LARGE FAB ASSY	Due Date :	30/04/2009	Qty: 4 Um: Each
Written By :				
Checked & Approved By :	JUD 09-04-07			
Comment :	Est Rev:B 05.10.14 Modified step 10 KJ/EC Est Rev:C 06-06-19 Added D2732-030 AS PER DSI9294 JLM Est Rev:C 06-06-27 Revised as per DSI9340 JLM			

Additional Product

Job Number:



Seq. #:	Machine Or Operation:	Description :
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1.0	DC	DOCUMENT CONTROL
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for JUD 09/04/30



Comment: DOCUMENT CONTROL

Photocopy bluefile and type labels as per PPP D350-591-214 CHG002

SAD 09/04/30

✓ 2.0	D2622120C	Step Extrusion
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Comment: Qty.: 0.5000 Each(s)/Unit Total: 2.0000 Each(s)

Pick:

Qty Part Number
.5 D2622-120Description Batch
Extrusion B45494

SAD 09-04-15 (4)

3.0	LARGE FAB 1	LARGE FABRICATION RESOURCE 1
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Comment: LARGE FABRICATION RESOURCE 1

1-Cut D2622-120 extrusion to 59.75" long as per Dwg D3078

2-Drill extrusion as per Dwg D3078 using Jig DT8680 for rivets.

3-Deburr

SAD 09-04-15 (4) (5)

4.0	QC5	INSPECT WORK TO CURRENT STEP
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Comment: INSPECT WORK TO CURRENT STEP

SAD 09/04/15 (4)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
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Job Number:



Seq. #:

Machine Or Operation:

Description :

5.0

D30671

End Plate



Comment: Qty.: 1.0000 Each(s)/Unit Total : 4.0000 Each(s)

Pick:

Qty Part Number

Description Batch

1 D3067-1

End Plate

846334

PH 09.04.17

4

6.0

D30631

Support



Comment: Qty.: 1.0000 Each(s)/Unit Total : 4.0000 Each(s)

Pick:

Qty Part Number

Description Batch

1 D3063-1

Support

844162

PH 09.04.17

4

7.0

LARGE FAB 1

LARGE FABRICATION RESOURCE 1



Comment: LARGE FABRICATION RESOURCE 1

1-Bevel end for welding FWD ONLY

2-Weld Support using Jig DT8681, weld Fwd End Plate as per QSI 004 & Dwg D3078

A/R Aluminum Rod *M110130*

3-Grind End Plate flush

PH 09.04.17

4

PH 09.04.17

4

SAD 09-04-20

(4)

8.0

QC9

VISUAL WELDING INSPECTION



Comment: VISUAL WELDING INSPECTION

BE 09-04-20

(4)

9.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

S 09/04/20

(+4/20)

10.0

HAND FINISHING1

HAND FINISHING RESOURCE #1



Comment: HAND FINISHING RESOURCE #1

Chemical Conversion Coat as per QSI 005 4.1

SAD 09-04-20

(4)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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Drawing Name: SHORT STEP ASSEMBLY HIGH SKID RH

Job Number: 46998

Part Number: D350591214

Job Number:



Seq. #: Machine Or Operation: Description :

11.0

QC3

INSPECT POWDER COAT/CHEMICAL CONVERSION



4X

Comment: INSPECT POWDER COAT/CHEMICAL CONVERSION

M-1 09/04/21

12.0

D3065041

Step Leg Assembly Hi



Comment: Qty.: 1.0000 Each(s)/Unit Total : 4.0000 Each(s)

Pick:

Qty Part Number Description Batch

1 D3065-041 Step Leg Assy B45395

SAD 09-04-21

④

13.0

D30661

Spacer



Comment: Qty.: 2.0000 Each(s)/Unit Total : 8.0000 Each(s)

Pick:

Qty Part Number Description Batch

2 D3066-1 Spacer B44562

SAD 09-04-21

④

14.0

MS20600AD4W4

Rivets



Comment: Qty.: 16.0000 Each(s)/Unit Total : 64.0000 Each(s)

Pick:

Qty Part Number Description Batch

16 MS20600AD4W4 Rivet M111359

SAD 09-04-21

④

15.0

LARGE FAB 1

LARGE FABRICATION RESOURCE 1



Comment: LARGE FABRICATION RESOURCE 1

Rivet Leg Assembly as per Dwg D3078.

SAD 09-04-21

④

16.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

09/04/21 x4RH

17.0

D30671

End Plate



Comment: Qty.: 1.0000 Each(s)/Unit Total : 4.0000 Each(s)

Pick:

Qty Part Number Description Batch

1 D3067-1 End Plate B46334

09-04-23 4

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
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Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: SHORT STEP ASSEMBLY HIGH SKID RH

Job Number: 46998

Part Number: D350591214

Job Number:



Seq. #: Machine Or Operation: Description :

18.0 LARGE FAB 1 LARGE FABRICATION RESOURCE 1



Comment: LARGE FABRICATION RESOURCE 1

1-Bevel Aft end for welding

2-Inspect for foreign object as per QSI 024

3-Weld Aft End Plate as per QSI 004 & Dwg D3078

A/R Aluminum Rod *M110130*

4-Grind End Plate flush

FL 09.04.23 4
FL 09.04.23 4
FL 09.04.23 4
SAD 09-04-24 (4)

19.0 QC9 VISUAL WELDING INSPECTION



Comment: VISUAL WELDING INSPECTION

PS 09.04.27

20.0 QC5 INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

S 09/04/27 (x4) (P10)

21.0 HAND FINISHING1 HAND FINISHING RESOURCE #1



Comment: HAND FINISHING RESOURCE #1

Touch Up Chemical conversion

MO/ FL

09/04/28

22.0 POWDER COATING POWDER COATING



Comment: POWDER COATING

Powder Coat White Gloss (Ref: 4.3.5.1) as per QSI 005 4.3

M109996 Pressure wash MO

09/04/28 (x4)

START TIME:

10:55

OVEN TEMPERATURE:

400° 320°

FINISH TIME:

11:25 MO/ FL

09/04/29 (x4)

23.0 HAND FINISHING1 HAND FINISHING RESOURCE #1



Comment: HAND FINISHING RESOURCE #1

Wing Walk as per Dwg D3078 and QSI 005 4.4

M111813

FL 09/04/29

(4)

W/O:		WORK ORDER CHANGES					
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Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

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Drawing Name: SHORT STEP ASSEMBLY HIGH SKID RH

Job Number: 46998

Part Number: D350591214

Job Number:



Seq. #:

Machine Or Operation:

Description :

24.0

QC3

INSPECT POWDER COAT/CHEMICAL CONVERSION



W
SD

Comment: Inspect Powder Coat and Wing Walk

9/4/30

25.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Pick Packing Kit

26.0

D22303

Lug



Comment: Qty.: 2.0000 Each(s)/Unit Total : 8.0000 Each(s)

Pick: Packing Kit

Qty Part Number

Description Batch

2 D2230-3

Clamp

B45915

B46516

9/4/30

SC

27.0

D22301

Lug



Comment: Qty.: 2.0000 Each(s)/Unit Total : 8.0000 Each(s)

Pick: Packing Kit

Qty Part Number

Description Batch

2 D2230-1

Clamp

B46427

9/4/30

SC

28.0

D2732

Rubber Extrusion



Comment: Qty.: 1.0000 f(s)/Unit Total : 4.0000 f(s)

Rubber Extrusion

4 X 3"

Batch:

B38509

9/4/30

SC

29.0

D2856400

Abrasion Strip



Comment: Qty.: 0.6000 f(s)/Unit Total : 2.4000 f(s)

Pick: Packing Kit

Qty Part Number

Description Batch

1 D2856-400(7.2")

Abrasion Strip

B46543

9/4/30

SC

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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Job Number: 46998

Part Number: D350591214

Job Number:



Seq. #:

Machine Or Operation:

Description :

30.0

AN335A

Bolt



Comment: Qty.: 2.0000 Each(s)/Unit Total : 8.0000 Each(s)

Pick: Packing Kit

Qty Part Number Description Batch

2 AN3-35A

Bolt

M110467

9/4/30

SP

31.0

AN411A

Bolt



Comment: Qty.: 6.0000 Each(s)/Unit Total : 24.0000 Each(s)

Pick: Packing Kit

Qty Part Number Description Batch

6 AN4-11A

Bolt

M106605

9/4/30

SP

32.0

AN413A

Bolt



Comment: Qty.: 4.0000 Each(s)/Unit Total : 16.0000 Each(s)

Bolt

Batch: M110731

9/4/30

SP

33.0

AN960JD10

Washer



Comment: Qty.: 4.0000 Each(s)/Unit Total : 16.0000 Each(s)

Pick: Packing Kit

Qty Part Number Description Batch

4 AN960JD10

Washer

M110985

9/4/30

SP

34.0

AN960JD416

Washer



Comment: Qty.: 12.0000 Each(s)/Unit Total : 48.0000 Each(s)

Pick: Packing Kit

Qty Part Number Description Batch

12 AN960JD416

Washer

M110363

9/4/30

SP

35.0

MS21042L3

Nut



Comment: Qty.: 2.0000 Each(s)/Unit Total : 8.0000 Each(s)

Pick: Packing Kit

Qty Part Number Description Batch

2 MS21042L3

Nut (or -3)

M110844

9/4/30

SP

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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Job Number: 46998

Part Number: D350591214

Job Number:



Seq. #:

Machine Or Operation:

Description :

36.0

MS21042L4

Nut



(42)

Comment: Qty.: 6.0000 Each(s)/Unit Total : 24.0000 Each(s)

Pick: Packing Kit

Qty Part Number Description Batch

MS21042L4

Nut (or -4)

M110450

9/4/27

SP

37.0

QC4

INSPECT 100% KITS FOR COMPLETENESS



Comment: INSPECT 100% KITS FOR COMPLETENESS

09/04/30 (42)

38.0

PACKAGING 1

PACKAGING RESOURCE #1



(42)

Comment: PACKAGING RESOURCE #1

Identify and pack for shipping as per PPP D350-591-214

Location: 86

PPP Rev: 12

9/4/30

SP

39.0

QC21

FINAL INSPECTION/W/O RELEASE



09/05/01

Comment: FINAL INSPECTION/W/O RELEASE

Job Completion



MF
09-05-01

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries



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CHECKED <i>[Signature]</i>	APPROVED <i>[Signature]</i>	DRAWING NO. D3078	REV. A SHEET 1 OF 2
DATE 02.09.11		TITLE STEP ASSEMBLY, HI SHORT SCALE NTS	
A	02.09.11	NEW ISSUE	

RELEASED
02.09.20 *[Signature]*

Part No.	Description	QTY -041	QTY -042
D3078-041	Step Assembly, High Short (LH)	X	
D3078-042	Step Assembly, High Short (RH)		X
D2622-60	STEP EXTRUSION	1	1
D3063-1	SUPPORT	1	1
D3065-041	LEG ASSEMBLY	1	1
D3066-1	SPACER	2	2
D3067-1	END PLATE	2	2
MS20600AD4W4	RIVET	16	16

GENERAL NOTES:

- 1) -041 SHOWN, FOR -042 INSTALL D3063-1 SUPPORT OPPOSITE SIDE
- 2) WELD PER DART QSI 004
- 3) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
POWDER COAT ASSEMBLY WHITE (4.3.5.1) PER DART QSI 005 4.3
BLACK ANTI-SKID PAINT PER DART QSI 005 4.4
- 4) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED.

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WITHIN 10 DAYS
NO. 46998

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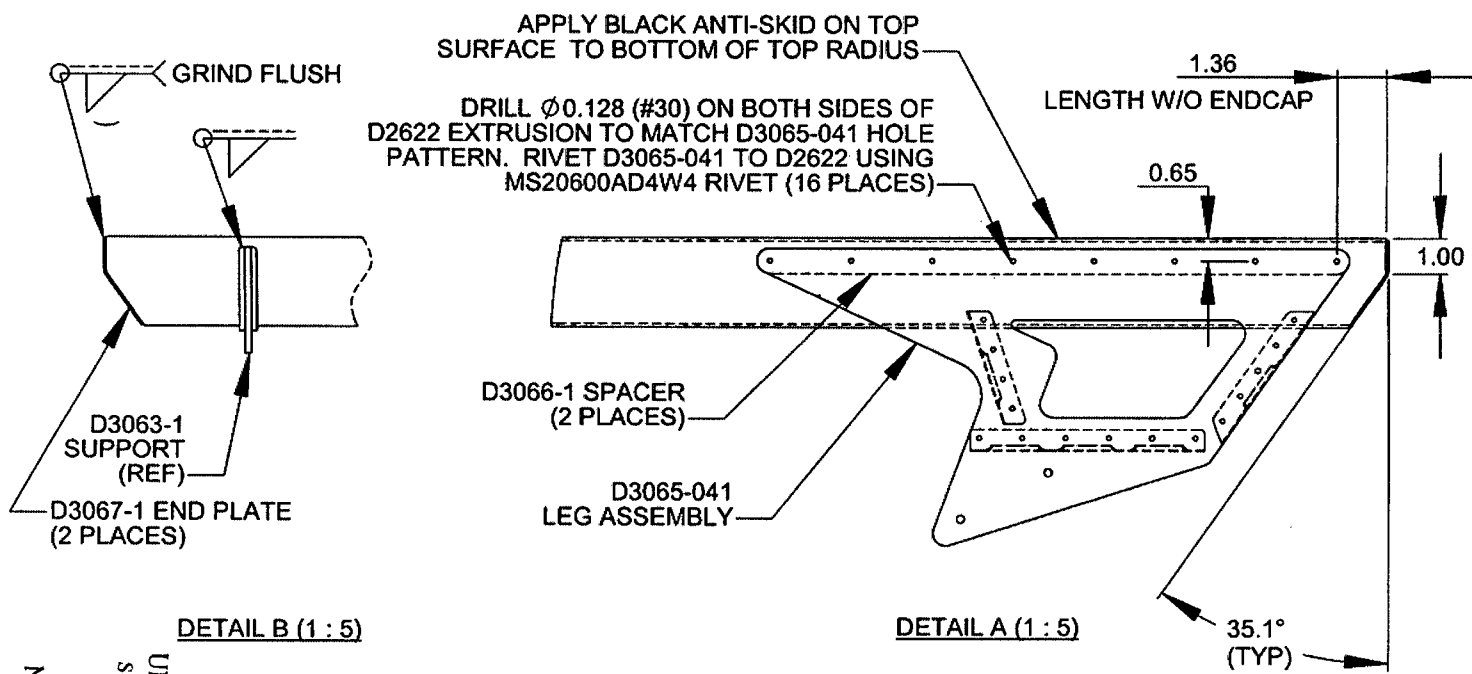
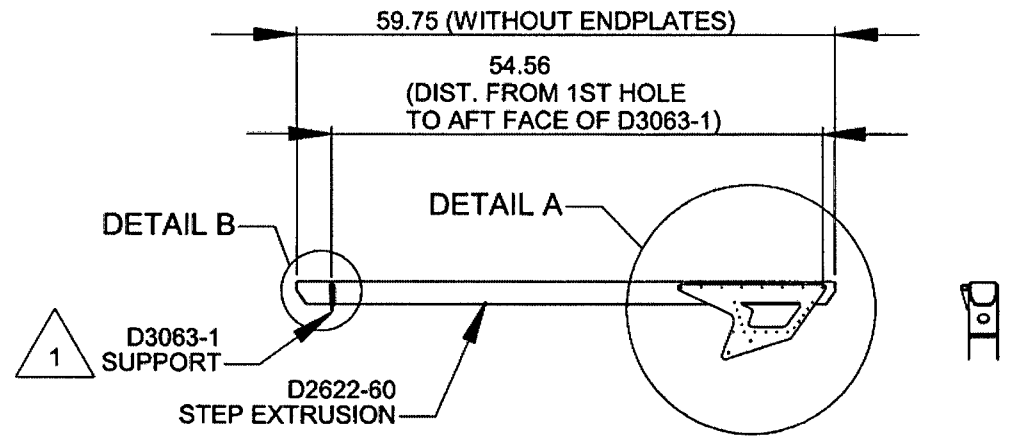
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DART



RELEASED
02.09.2004

DESIGN	SP	DRAWN BY	SP	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA
CHECKED	SP	APPROVED	SP	REV. A
DATE	02.09.11	TITLE	D3078	SHEET 2 OF 2
			STEP ASSEMBLY, HI SHORT	SCALE 1:20



DETAIL B (1:5)

DETAIL A (1:5)

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